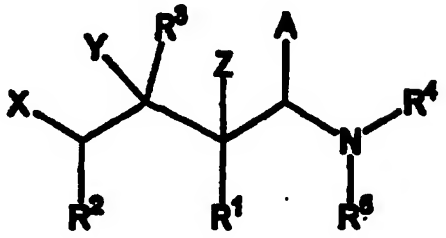
II. CLAIM AMENDMENTS

1. (Currently Amended) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds of the ~~general~~ formula I,



I

in which

R^1 and R^2, identical or different, denote a C_{1-6} alkyl ~~residue~~ group or together form a ring as $(CH_2)_{2-6}$, which may also be substituted or benzo-fused with at least one optionally at least mono-substituted aryl or heteroaryl ~~residue~~ group,

R^3 denotes a C_{3-6} alkyl, a C_{3-7} cycloalkyl, an optionally at least mono-substituted aryl or heteroaryl ~~residue~~ group or an optionally at least mono-substituted aryl or heteroaryl ~~residue~~ group attached via a C_{1-3} alkylene group,

R^4 and R^5, identical or different, denote a C_{1-6} alkyl, a C_{3-7} cycloalkyl, a phenyl, a benzyl or a phenethyl ~~residue~~ group or R^4 and R^5 together form a ring as $(CH_2)_{3-6}$ or $-CH_2-CH_2-O-CH_2-CH_2$,

X and Y or Y and Z together denote a bond,

A denotes an optionally at least mono-substituted aryl or heteroaryl ~~residue~~ group,

in the form of the racemates, diastereomers or enantiomers thereof as a free base or a corresponding physiologically acceptable salt.

2. (Currently Amended) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds according to claim 1, characterised in that R^1 and R^2 together form a $(CH_2)_{2-6}$ ring, which may also be substituted or benzo-fused with at least one optionally at least mono-substituted aryl or heteroaryl ~~residue~~ group.

3. (Currently Amended) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds according to claim 1, characterised in that R^1 and R^2 together form a cyclohexyl ring, which may also be substituted with an optionally at least mono-substituted phenyl ~~residue~~ group.

4. (Currently Amended) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds according to claim 1, characterised in that R^3 denotes an optionally at least mono-substituted aryl ~~residue~~ group or an optionally at least mono-substituted aryl ~~residue~~ group attached via a C_{1-3} alkylene group~~, preferably an optionally at least mono-substituted phenyl, benzyl or phenethyl residue~~.

5. (Currently Amended) Substituted 1-aryl-but-3-enylamine and

1-aryl-but-2-enylamine compounds according to claim 1, characterised in that the ~~residue~~ groups R^4 and R^5, identical or different, denote a C_{1-6} alkyl ~~residue~~ group or together form a $-(CH_2)_5-$ or $-CH_2-CH_2-O-CH_2-CH_2$ ring, preferably, identical or different, denote a C_{1-2} alkyl ~~residue~~ group.

6. (Previously Presented) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds according to claim 1, characterised in that X and Y together denote a bond.

7. (Currently Amended) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds according to claim 1, characterised in that A denotes an optionally at least mono-substituted aryl ~~residue~~ group~~, preferably an optionally at least mono-substituted phenyl residue~~.

8. (Currently Amended) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds according to claim 1:

Dimethyl-[phenyl-(2-phenyl-cyclohex-1-enyl)-methyl]-amine,

{[2-(4-Chloro-phenyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

[(2-Benzyl-cyclohex-1-enyl)-phenyl-methyl]-dimethylamine,

{[2-(4-Fluoro-3-methyl-phenyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

Dimethyl-[phenyl-(2-o-tolyl-cyclohex-1-enyl)-methyl]-amine,

[(2-Cyclopentyl-cyclohex-1-enyl)-phenyl-methyl]-dimethyl-amine,

Dimethyl-[phenyl-(2-m-tolyl-cyclohex-1-enyl)-methyl] -amine,

(Bicyclohexyl-1-en-2-yl-phenyl-methyl)-dimethyl-amine,

{[2-(4-Fluoro-phenyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl- amine,

Dimethyl-[(2-phenethyl-cyclohex-1-enyl)-phenyl-methyl]-amine,

{[2-(3-Methoxy-phenyl)-cyclohex-1-enyl]-phenyl methyl}-dimethyl-amine,

Dimethyl-{phenyl-[2-(3-phenyl-propyl)-cyclohex-1-enyl]-methyl}-amine,

{[2-(2-Chloro-benzyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

{[2-(4-Fluoro-benzyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

{[2-(3-Methoxy-benzyl)-cyclohex-1-enyl]-phenyl methyl}-dimethyl-amine,

{[2-(3-Fluoro-benzyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

{[2-(2-Methoxy-benzyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

{[2-(3,5-Difluoro-benzyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

{[2-(2-Fluoro-benzyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

{[2-(2-Chloro-benzyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

{[2-(3-Fluoro-benzyl)-cyclohex-1-enyl]-phenyl-methyl)-dimethyl-amine,

Dimethyl-{phenyl-[2-(3-trifluoromethyl-benzyl)-cyclohex-1-enyl]-methyl}-amine,

Dimethyl-[(2-phenethyl-cyclohex-1-enyl)-phenyl-methyl}-amine,

3-[6-(Dimethylamino-phenyl-methyl)-cyclohex-1-enyl]-phenol,

Dimethyl-{phenyl-(2-(4-trifluoromethylphenyl)-cyclohex-1-enyl]-methyl}-amine,

2-Chloro-5-[6-(dimethylamino-phenyl-methyl)-cyclohex-1-enyl]-phenol,

{[2-(4-Methoxy-phenyl)-cyclohex-2-enyl]-phenyl-

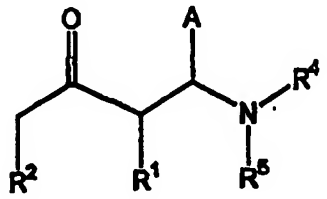
methyl}-dimethyl-amine,

{[2-(4-Chloro-phenyl)-cyclohex-1-enyl]-phenyl-methyl}-dimethyl-amine,

Dimethyl-[(2-phenyl-cyclohex-1-enyl)- (4-trifluoromethyl-phenyl)-methyl]-amine,

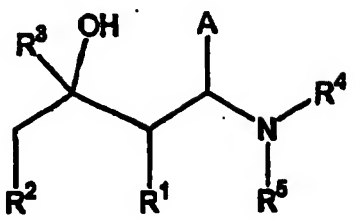
and the corresponding physiologically acceptable salts~~, preferably the hydrochlorides thereof~~.

9. (Currently Amended) A process for the production of substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds of the ~~general~~ formula I according to claim 1, characterised in that at least one Mannich base of the ~~general~~ formula II,



II

in which R^1, R^2, R^4, R^5 and A have the meaning according to the ~~general~~ formula I according to claim 1, is reacted with at least one organometallic compound of the ~~general~~ formula R^3-B, in which B denotes MgCl, MgBr, MgI or Li and R^3 has the meaning according to the ~~general~~ formula I according to claim 1, to yield at least one alcohol of the ~~general~~ formula III,



III

in which the ~~residue~~ groups R^1 to R^5 and A have the meaning according to the ~~general~~ formula I according to claim 1, and this is optionally purified by conventional methods and/or optionally isolated by conventional methods, and reacted with a suitable acid optionally in the presence of a suitable solvent to yield at least one compound of the ~~general~~ formula I according to claim 1.

10. (Original) A process according to claim 9, characterised in that a protonic acid, a Lewis acid or a mixture thereof is used as suitable acid.

11. (Original) A process according to claim 10, characterised in that hydrogen bromide, hydrogen chloride or formic acid is used as protonic acid.

12. (Previously Presented) A process according to claim 10, characterised in that trimethylsilyl iodide or chlorotrimethylsilane is used as the Lewis acid.

13. (Currently Amended) A process according to claim 9, characterised in that reaction of the alcohol with the acid is performed at a temperature of 5 to 150°C~~, preferably at a temperature of 10 to 130°C, particularly preferably at a~~

~~temperature of 15 bis 1200C~~.

14. (Previously Presented) A pharmaceutical preparation containing at least one substituted 1-aryl-but-3-enylamine or 1-aryl-but-2-enylamine compound according to claim 1 and optionally physiologically acceptable auxiliary substances.

15. (Original) A pharmaceutical preparation according to claim 14 for combatting pain.

16. (Original) A pharmaceutical preparation according to claim 14 for the treatment of depression.

17. (Currently Amended) A pharmaceutical preparation according to claim 14 for the treatment of ~~hypertension~~ hypotension.

18. (Original) A pharmaceutical preparation according to claim 14 for the treatment of hypertension.

19. (Original) A pharmaceutical preparation according to claim 14 for the treatment of senile dementia.

20-21. (Canceled)

22. (Original) A pharmaceutical preparation according to claim 14 for the treatment of tinnitus.

23. (Original) A pharmaceutical preparation according to claim 14 for the treatment of hardness of hearing.

24. (Original) A pharmaceutical preparation according to claim 14 for the treatment of epilepsy.

25. (Original) A pharmaceutical preparation according to claim 14 for the treatment of obesity.

26. (Original) A pharmaceutical preparation according to claim 14 for the treatment of cachexia.

27. (Original) A pharmaceutical preparation according to claim 14 for the treatment of urinary incontinence.

28. (Original) A pharmaceutical preparation according to claim 14 for anxiolysis.

29. (Original) A pharmaceutical preparation according to claim 14 for diuresis.

30. (Currently Amended) A method of treating ~~Use of at least one substituted 1-aryl-but-3-enylamine or 1-aryl-but-2-enylamine compound according to claim 1 for the production of a pharmaceutical preparation for combatting~~ pain, ~~for the treatment of~~ depression, hypotension, hypertension, senile dementia, Alzheimer's disease, general cognitive dysfunction, tinnitus, hardness of hearing, epilepsy, obesity, cachexia or urinary incontinence or for anxiolysis or diuresis comprising administering to a patient in need thereof a therapeutic amount of a pharmaceutical preparation comprising at least one substituted 1-aryl-but-3-enylamine or 1-aryl-but-2-enylamine compound according to claim 1.

31. (New) A substituted 1-aryl-but-3-enylamine and 1-aryl-but-

2-enylamine compounds according to claim 4, characterised in that R^3 denotes an optionally at least mono-substituted phenyl, benzyl or phenethyl group attached via a C_{1-3} alkylene group.

32. (New) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds according to claim 7, characterised in that A denotes an optionally at least mono-substituted phenyl group.

33. (New) A compound of claim 8 where the corresponding physiologically acceptable salt is the hydrochloride thereof.

34. (New) A process according to claim 9, characterised in that reaction of the alcohol with the acid is performed at a temperature of 15 to 120°C.

35. (New) A process according to claim 9, characterised in that reaction of the alcohol with the acid is performed at a temperature of 10 to 130°C.

36. (New) Substituted 1-aryl-but-3-enylamine and 1-aryl-but-2-enylamine compounds according to claim 1, characterised in that the groups R^4 and R^5, identical or different, denote a C_{1-2} alkyl group.